

REMARKS

Claims 13-20 and 22-27 are pending in this application. By this Amendment, the specification and claims 13, 23 and 25-27 are amended. The specification is amended to correct minor informalities. No new matter is added. Claims 13 and 25-27 are the independent claims.

Applicant respectfully notes that the present action does not indicate that the claim to foreign priority under 35 U.S.C. §119 has been acknowledged or that certified copies of all priority documents have been received by the U.S.P.T.O. Applicant respectfully requests that the Examiner's next communication include an indication as to the claim to foreign priority under 35 U.S.C. §119 and an acknowledgement of receipt of the certified copies of all priority documents.

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Entry of After Final Amendment

Entry of this Amendment is proper under 37 C.F.R. §1.116 since the amendments; (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issues requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for Appeal, should an Appeal be necessary. Entry of the Amendment is thus respectfully requested.

Objections to the Claims

Claim 13 is objected to for informalities. By the instant Amendment, claim 13 has been amended to obviate the objection. Withdrawal of the objection to claim 13 is respectfully requested.

Objections to the Drawings

The drawings are objected to because they must show every feature of the invention specified in the claims. In particular, the Examiner asserted that the "vacuum difference measuring device" must be shown or the features cancelled from the claims. Applicant respectfully traverses this objection.

Specifically, Applicant respectfully submits that 35 U.S.C. § 113 states that an "Applicant may furnish a drawing where necessary for *understanding* the subject matter sought to be patented." However, the subject matter sought to be patented does not necessitate a drawing for understanding the invention. That is, the "vacuum difference measuring device" is not necessary for the understanding of the invention. In fact, one skilled in the art would appreciate that a vacuum difference measuring device is present to obtain the vacuum difference between the lower end of the teacup liner and the space. Therefore, since the "vacuum difference measuring device" is not necessary for understanding the invention, it is not necessary in the drawings.

Notwithstanding the above, FIGS. 4 and 5 illustrate the vacuum difference measuring device, which is shown as an adjustment to the vacuum level and/or determine vacuum difference from each teat.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection to the drawings.

Claim Rejections - 35 U.S.C. § 112

I. First Paragraph

Claims 13-20 and 22-27 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully traverses this rejection for the reasons discussed below. In particular, the Examiner states that the control device as recited in claim 13 being used to adjust the vacuum and used to adjust the vacuum level according to the measured vacuum difference is not disclosed by the original disclosure.

By the instant amendment, claim 13 has been amended, taking into consideration the Examiner's consideration, to obviate the rejection. Specifically, claim 13 has been amended to recite that the "vacuum difference measuring device is provided to adjust a vacuum level in the space during milking according to at least the measured vacuum difference." Support for such an amendment may be found in the originally filed disclosure, e.g., at page 6, line 26 – page 7, line 2. No new matter is added.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

II. Second Paragraph

Claims 13-20 and 22-24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant respectfully traverses this rejection for the reasons discussed below.

As similarly discussed above, Applicant has amended claim 13 that the vacuum difference measuring device is provided to adjust the vacuum level in the space during milking according to at least the measured vacuum difference.

Further, Applicant has also amended claims 13 and 23 to obviate the rejections regarding proper antecedent basis.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

Claim Rejections - 35 U.S.C. § 102

Claims 13, 15, 18, 20, 22, 25 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2007/0215053 ("Duke"). Applicant respectfully traverses this rejection for the reasons discussed below.

Applicant respectfully submits that the Duke reference fails to disclose or suggest each and every element of claim 13, and therefore, an anticipatory rejection has not been established.¹

For example, claim 13, as amended, recites, *inter alia*:

a vacuum difference measuring device, provided to measure a vacuum difference between the lower end of said teat cup liner and said space, and provided to adjust a vacuum level in said space during milking according to at least said measured vacuum difference.

In particular, Applicant respectfully submits that the Duke reference does not teach or suggest of measuring the vacuum difference between the lower end of the teat

¹ A claim is anticipatory only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. See MPEP §2131; *Verdegaal Bros. vs. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053, (Fed. Cir. 1987).

cup liner and the space (105), and controlling the vacuum in response to the vacuum difference.

In the outstanding Final Office Action, the Examiner contends that paragraph [0056], lines 20-29 of Duke teaches the vacuum difference measuring device.² Applicant respectfully submits, however, that paragraph [0056] of Duke merely discloses that “outlet port is subject to the level of the vacuum present at the distributor inlet 114 and, hence, via the distributor, delivery tubes 16 and nozzle 13, to the vacuum in the cavities 10 in the head of the liners.” Therefore, Applicant submits that the Duke reference does not disclose that the vacuum difference measuring device measures a vacuum difference between the lower end of the teat cup liner and the space.

Further, the Duke reference does not disclose controlling the vacuum in response to **the vacuum difference** between the lower end of the teat cup liner and the space.

Therefore, contrary to the Examiner’s contention, the Duke reference does not disclose or suggest each and every element of claim 13. Since the Duke reference fails to disclose each and every element of claim 13, it cannot provide a basis for a rejection under 35 U.S.C. §102(e) and, thus, is allowable. Claims 15, 18, 20 and 22, depend from amended claim 13 and, therefore, allowable for the similar reasons discussed above with respect to claim 13.

In regard to claims 25-27, the Examiner asserts that the limitations recited in claims 25-27, i.e., “to set the vacuum in said space in each teat cup so that all udder quarters finish milking simultaneously” or “provided to adjust a vacuum level in said

² See outstanding Final Office Action mailed July 2, 2009, page 5, paragraph 15.

space during milking according to at least said measured vacuum difference" is functional and capable of performing the intended use and, therefore, meets the claim limitations.³

Applicant respectfully submits, however, that the language recited in claims 13 and 25-27 do further structurally limit the claimed apparatus. While it is true that intended use of an apparatus does not distinguish over prior art references, functional limitations such as the language used in claims 13 and 25-27 are distinguishable over the prior art. See MPEP 2173.05(g), which states:

There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper.

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step.

In addition, "all words in a claim must be considered in judging patentability of that claim against the prior art." Emphasis added, citing In re Wilson, 165 USPQ 494, 496 (CCPA 1970).

Accordingly, Applicant respectfully submits that the language used in claims 13 and 25-27 are functional limitations that do imply structure and must be evaluated and considered just like any other limitation of the claims.

For at least these reasons, the Examiner is respectfully requested to reconsider and withdraw the §102(e) rejection of claims 13, 15, 18, 20, 22, 25 and 27.

³ See Final Office Action mailed July 2, 2009, page 9, paragraph 35.

Claim Rejections - 35 U.S.C. § 103

Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 98/28969 (“Oosterling”) in view of WO 0045630 (“Ahrweiler”). Applicants respectfully traverse this rejection for the reasons discussed below.

In order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), all of the claim limitations of the rejected claims must be described or suggested by the cited document(s).⁴ Applicant respectfully submits that the cited documents do not meet this criterion because no modification and/or combination of the Oosterling and Ahrweiler references will describe or suggest all of the claim limitations of rejected claims 13 and 14, and therefore, a *prima facie* case of obviousness has not been established.

For example, claim 13 recites, *inter alia*:

a vacuum difference measuring device, provided to measure a vacuum difference between the lower end of said teat cup liner and said space, and provided to adjust a vacuum level in said space during milking according to at least said measured vacuum difference.

In the outstanding Final Office Action, the rejection is based on an assertion that the Oosterling reference discloses all of the above features except for the vacuum difference measuring device. Yet, the Examiner attempts to overcome the admitted deficiency of Oosterling by arguing that the Ahrweiler reference teaches the vacuum difference measuring device. Applicant respectfully disagrees.

In particular, Applicant submits that the Ahrweiler reference discloses a plurality of sensors M1-M11 for measuring pressures such that the pressure valves are correlated to one another to allow pressure differences to be determined. Thus,

⁴ See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). See also MPEP §2143.03.

there is nothing explicit with regard to the sensors M10 and M1 (corresponding to the sensors of claim 13) and that the pressures of these two sensors should be used for obtaining a pressure difference. Accordingly, Applicant submits that the Ahrweiler reference does not disclose **a vacuum difference measuring device for adjusting a vacuum level in the space in response to the sense or measured vacuum difference.**

Accordingly, Applicant respectfully submits that the Oosterling and Ahrweiler references, individually or in combination, fail to disclose or suggest, *inter alia* "a vacuum difference measuring device, provided to measure a vacuum difference between the lower end of said teat cup liner and said space, and provided to adjust a vacuum level in said space during milking according to at least said vacuum difference," as recited in claim 13.

Since the rejection fails to disclose or suggest each and every element of the rejected claims, Applicant respectfully submits that no *prima facie* case of obviousness has been established with respect to claim 13.

In view of the above, Applicant respectfully submits that the Oosterling and Ahrweiler references fail to disclose or suggest each and every element of claim 13, and therefore, claim 13 is allowable over the cited prior art. Claim 14 is dependent from claim 13, and therefore, also allowable. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 16 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Duke in view of WO 01/19169 ("Bosma"). Applicants respectfully traverse this rejection for the reasons discussed below.

Claims 16 and 23 are believed to be allowable for at least the reasons set forth above regarding claim 13. The Bosma reference fails to provide the teachings noted above as missing from the Duke reference. Since claims 16 and 23 are patentable at least by virtue of their dependency on claim 13, Applicant respectfully requests that the rejection of claims 16 and 23 under 35 U.S.C. § 103(a) be withdrawn.

Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Duke. Applicants respectfully traverse this rejection for the reasons discussed below.

Claim 17 is believed to be allowable for at least the reasons set forth above regarding claim 13. Since claim 17 is patentable at least by virtue of its dependency on claim 13, Applicant respectfully requests that the rejection of claim 17 under 35 U.S.C. § 103(a) be withdrawn.

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Duke in view of U.S. Patent Application Publication No. 2005/0072362 ("Innings"). Applicants respectfully traverse this rejection for the reasons discussed below.

Claim 19 is believed to be allowable for at least the reasons set forth above regarding claim 13. The Innings reference fails to provide the teachings noted above as missing from the Duke reference. Since claim 19 is patentable at least by virtue of its dependency on claim 13, Applicant respectfully requests that the rejection of claim 17 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

In view of the above remarks and amendments, Applicant respectfully submits that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. Further, the above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome the rejections. However, these remarks are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied prior art. Accordingly, Applicant does not contend that the claims are patentable solely on the basis of the particular claim elements discussed above.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned, at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

John A. Castellano, Reg. No. 35,094

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

JAC/DJC:clc